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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of:

MUNROE et al.

Group Art Unit: 1647

Application No.: 10/084,507

Examiner: R. Deberry (expected)

Filed: February 28, 2002

Attorney Dkt. No.: 108074-00023

For: AN ISOLATED HUMAN EDG-4 RECEPTOR (AS AMENDED)

SUBSTITUTE STATEMENT UNDER 37 CFR §1.821(C)

Commissioner of Patents and Trademarks
Washington, D.C. 20231

Date: June 14, 2002

Sir:


In accordance with 37 C.F.R.1.821(C), applicants are submitting herewith the Sequence Listing for the above-identified application both in paper copy form and in computer readable form.

The name of the file on the computer readable form is 100879_1.asc. The paper copy and the computer readable form are the same.

In the event that any fees are due with respect to the filing of this paper, please charge to our Deposit Account No. 01-2300, referencing Docket No. 108074-00023.

Respectfully submitted,

ARENT FOX KINTNER PLOTKIN & KAHN PLLC


Richard J. Berman
Registration No. 39,107

Customer No. 004372
ARENT FOX KINTNER PLOTKIN & KAHN, PLLC
1050 Connecticut Avenue, N.W., Suite 400
Washington, D.C. 20036-5339
Tel: (202) 857-6000; Fax: (202) 638-4810
RJB/elp

Enclosures: Paper Copy of Sequence Listing
Disk Containing Sequence Listing

100885_1.DOC

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SEQUENCE LISTING



<110> MUNROE, Donald G.
KAMBOJ, Rajender
PETERS, Diana
KOOSHESH, Fatemeh
VYAS, Tejal B.
GUPTA, Ashwani K.

<120> IDENTIFICATION OF LYSOLIPID RECEPTORS INVOLVED IN
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<140> 09/222,995

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<150> 60/109,885

<151> 1998-11-25

<150> 60/080,610

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<150> 60/070,185

<151> 1997-12-30

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 ccattgtggt ggaaaaacctt ctggtgctca ttgcgggtggc ccgaaacagc aagttccact 240
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 Glu Tyr Leu Asn Pro Asn Lys Val Gln Glu His Tyr Asn Tyr Thr Lys
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gag acg ctg gaa acg cag gag acg acc tcc cgc cag gtg gcc tcg gcc 151
 Glu Thr Leu Glu Thr Gln Glu Thr Thr Ser Arg Gln Val Ala Ser Ala
 25 30 35

ttc atc gtc atc ctc tgt tgc gcc att gtg gtg gaa aac ctt ctg gtg 199
 Phe Ile Val Ile Leu Cys Cys Ala Ile Val Val Glu Asn Leu Leu Val
 40 45 50

ctc att gcg gtg gcc cga aac agc aag ttc cac tcg gca atg tac ctg 247
 Leu Ile Ala Val Ala Arg Asn Ser Lys Phe His Ser Ala Met Tyr Leu
 55 60 65 70

ttt ctg ggc aac ctg gcc gcc tcc gat cta ctg gca ggc gtg gcc ttc 295
 Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu Leu Ala Gly Val Ala Phe
 75 80 85

gta gcc aat acc ttg ctc tct ggc tct gtc acg ctg agg ctg acg cct 343
 Val Ala Asn Thr Leu Leu Ser Gly Ser Val Thr Leu Arg Leu Thr Pro
 90 95 100

gtg cag tgg ttt gcc cgg gag ggc tct gcc ttc atc acg ctc tcg gcc	391
Val Gln Trp Phe Ala Arg Glu Gly Ser Ala Phe Ile Thr Leu Ser Ala	
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Ser Val Phe Ser Leu Leu Ala Ile Ala Ile Glu Arg His Val Ala Ile	
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Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys Ser Cys Arg Met Leu Leu	
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Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu Val Leu Gly Gly Leu Pro	
155 160 165	
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Ile Leu Gly Trp Asn Cys Leu Gly His Leu Glu Ala Cys Ser Thr Val	
170 175 180	
ctg cct ctc tac gcc aag cat tat gtg ctg tgc gtg gtg acc atc ttc	631
Leu Pro Leu Tyr Ala Lys His Tyr Val Leu Cys Val Val Thr Ile Phe	
185 190 195	
tcc atc atc ctg ttg gcc atc gtg gcc ctg tac gtg cgc atc tac tgc	679
Ser Ile Ile Leu Leu Ala Ile Val Ala Leu Tyr Val Arg Ile Tyr Cys	
200 205 210	
gtg gtc cgc tca agc cac gct gac atg gcc gcc ccg cag acg cta gcc	727
Val Val Arg Ser Ser His Ala Asp Met Ala Ala Pro Gln Thr Leu Ala	
215 220 225 230	
ctg ctc aag acg gtc acc atc gtg cta ggc gtc ttt atc gtc tgc tgg	775
Leu Leu Lys Thr Val Thr Ile Val Leu Gly Val Phe Ile Val Cys Trp	
235 240 245	
ctg ccc gcc ttc agc atc ctc ctt ctg gac tat gcc tgt ccc gtc cac	823
Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp Tyr Ala Cys Pro Val His	
250 255 260	
tcc tgc ccg atc ctc tac aaa gcc cac tac ytt ttc gcc gtc tcc acc	871
Ser Cys Pro Ile Leu Tyr Lys Ala His Tyr Xaa Phe Ala Val Ser Thr	
265 270 275	
ctg aat tcc ctg ctc aac ccc gtc atc tac acg tgg cgc agc cgg gac	919
Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr Thr Trp Arg Ser Arg Asp	
280 285 290	
ctg cgg cgg gag gtg ctt cgg ccg ctg cag tgc tgg cgg ccg ggg gtg	967
Leu Arg Arg Glu Val Leu Arg Pro Leu Gln Cys Trp Arg Pro Gly Val	
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 Gly Val Gln Gly Arg Arg Arg Gly Gly Thr Pro Gly His His Leu Leu
 315 320 325

cca ctc cgc agc tcc agc tcc ctg gag agg ggc atg cac atg ccc acg 1063
 Pro Leu Arg Ser Ser Ser Ser Leu Glu Arg Gly Met His Met Pro Thr
 330 335 340

tca ccc acg ttt ctg gag ggc aac acg gtg gtc tgaggggtggg ggtggaccaa 1116
 Ser Pro Thr Phe Leu Glu Gly Asn Thr Val Val
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Val Glu Asn Leu Leu Val Leu Ile Ala Val Ala Arg Asn Ser Lys Phe
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His Ser Ala Met Tyr Leu Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu
 65 70 75 80

Leu Ala Gly Val Ala Phe Val Ala Asn Thr Leu Leu Ser Gly Ser Val
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Thr Leu Arg Leu Thr Pro Val Gln Trp Phe Ala Arg Glu Gly Ser Ala
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Phe Ile Thr Leu Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile
 115 120 125

Glu Arg His Val Ala Ile Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys
 130 135 140

Ser Cys Arg Met Leu Leu Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu
 145 150 155 160

Val Leu Gly Gly Leu Pro Ile Leu Gly Trp Asn Cys Leu Gly His Leu
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Glu Ala Cys Ser Thr Val Leu Pro Leu Tyr Ala Lys His Tyr Val Leu
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Cys Val Val Thr Ile Phe Ser Ile Ile Leu Leu Ala Ile Val Ala Leu
 195 200 205

Tyr Val Arg Ile Tyr Cys Val Val Arg Ser Ser His Ala Asp Met Ala
 210 215 220

Ala Pro Gln Thr Leu Ala Leu Leu Lys Thr Val Thr Ile Val Leu Gly
 225 230 235 240

Val Phe Ile Val Cys Trp Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp
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Tyr Ala Cys Pro Val His Ser Cys Pro Ile Leu Tyr Lys Ala His Tyr
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Xaa Phe Ala Val Ser Thr Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr
 275 280 285

Thr Trp Arg Ser Arg Asp Leu Arg Arg Glu Val Leu Arg Pro Leu Gln
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Cys Trp Arg Pro Gly Val Gly Val Gln Gly Arg Arg Arg Gly Gly Thr
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Pro Gly His His Leu Leu Pro Leu Arg Ser Ser Ser Ser Leu Glu Arg
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Gly Met His Met Pro Thr Ser Pro Thr Phe Leu Glu Gly Asn Thr Val
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<212> DNA

<213> Homo sapiens

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<210> 20

<211> 1062

<212> DNA

<213> Homo sapiens

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tgcgacacg tcaccaaacg ggcctccccg agacggaagt agtgcgagag ccggagacag 360
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<210> 21
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Arg Lys Val Ala Ser Ala Phe Ile Ile Ile Leu Cys Cys Ala Ile Val
      35              40              45

Val Glu Asn Leu Leu Val Leu Ile Ala Val Ala Arg Asn Ser Lys Phe
      50              55              60

His Ser Ala Met Tyr Leu Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu
      65              70              75              80

Leu Ala Gly Val Ala Phe Val Ala Asn Thr Leu Leu Ser Gly Pro Val
      85              90              95

Thr Leu Ser Leu Thr Pro Leu Gln Trp Phe Ala Arg Glu Gly Ser Ala
      100             105             110

Phe Ile Thr Leu Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile
      115             120             125

Glu Arg Gln Val Ala Ile Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys
      130             135             140

Ser Cys Arg Met Leu Met Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu
      145             150             155             160

Ile Leu Gly Gly Leu Pro Ile Leu Gly Trp Asn Cys Leu Asp His Leu
      165             170             175

Glu Ala Cys Ser Thr Val Leu Pro Leu Tyr Ala Lys His Tyr Val Leu

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Tyr Val Arg Ile Tyr Phe Val Val Arg Ser Ser His Ala Asp Val Ala		
210	215	220
Gly Pro Gln Thr Leu Ala Leu Leu Lys Thr Val Thr Ile Val Leu Gly		
225	230	235
Val Phe Ile Ile Cys Trp Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp		
	245	250
Ser Thr Cys Pro Val Arg Ala Cys Pro Val Leu Tyr Lys Ala His Tyr		
	260	265
Phe Phe Ala Phe Ala Thr Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr		
	275	280
Thr Trp Arg Ser Arg Asp Leu Arg Arg Glu Val Leu Arg Pro Leu Leu		
	290	295
Cys Trp Arg Gln Gly Lys Gly Ala Thr Gly Arg Arg Gly Gly Asn Pro		
305	310	315
Gly His Arg Leu Leu Pro Leu Arg Ser Ser Ser Ser Leu Glu Arg Gly		
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Leu His Met Pro Thr Ser Pro Thr Phe Leu Glu Gly Asn Thr Val Val		
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<210> 22
 <211> 353
 <212> PRT
 <213> Homo sapiens

<400> 22
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 35 40 45
 Val Glu Asn Leu Leu Val Leu Ile Ala Val Ala Arg Asn Ser Lys Phe
 50 55 60

His Ser Ala Met Tyr Leu Phe Leu Gly Asn Leu Ala Ala Ser Asp Leu
65 70 75 80

Leu Ala Gly Val Ala Phe Val Ala Asn Thr Leu Leu Ser Gly Ser Val
85 90 95

Thr Leu Arg Leu Thr Pro Val Gln Trp Phe Ala Arg Glu Gly Ser Ala
100 105 110

Phe Ile Thr Leu Ser Ala Ser Val Phe Ser Leu Leu Ala Ile Ala Ile
115 120 125

Glu Arg His Val Ala Ile Ala Lys Val Lys Leu Tyr Gly Ser Asp Lys
130 135 140

Ser Cys Arg Met Leu Leu Leu Ile Gly Ala Ser Trp Leu Ile Ser Leu
145 150 155 160

Val Leu Gly Gly Leu Pro Ile Leu Gly Trp Asn Cys Leu Gly His Leu
165 170 175

Glu Ala Cys Ser Thr Val Leu Pro Leu Tyr Ala Lys His Tyr Val Leu
180 185 190

Cys Val Val Thr Ile Phe Ser Ile Ile Leu Leu Ala Val Val Ala Leu
195 200 205

Tyr Val Arg Ile Tyr Cys Val Val Arg Ser Ser His Ala Asp Met Ala
210 215 220

Ala Pro Gln Thr Leu Ala Leu Leu Lys Thr Val Thr Ile Val Leu Gly
225 230 235 240

Val Phe Ile Val Cys Trp Leu Pro Ala Phe Ser Ile Leu Leu Leu Asp
245 250 255

Tyr Ala Cys Pro Val His Ser Cys Pro Ile Leu Tyr Lys Ala His Tyr
260 265 270

Leu Phe Ala Val Ser Thr Leu Asn Ser Leu Leu Asn Pro Val Ile Tyr
275 280 285

Thr Trp Arg Ser Arg Asp Leu Arg Arg Glu Val Leu Arg Pro Leu Gln
290 295 300

Cys Trp Arg Pro Gly Val Gly Val Gln Gly Arg Arg Arg Gly Gly Thr
305 310 315 320

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<210> 23

<211> 351

<212> PRT

<213> Homo sapiens

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25

30

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35

40

45

Thr Asn Leu Leu Val Ile Ala Ala Ile Ala Ser Asn Arg Arg Phe His

50

55

60

Gln Pro Ile Tyr Tyr Leu Leu Gly Asn Leu Ala Ala Ala Asp Leu Phe

65

70

75

80

Ala Gly Val Ala Tyr Leu Phe Leu Met Phe His Thr Gly Pro Arg Thr

85

90

95

Ala Arg Leu Ser Leu Glu Gly Trp Phe Leu Arg Gln Gly Leu Leu Asp

100

105

110

Thr Ser Leu Thr Ala Ser Val Ala Thr Leu Leu Ala Ile Ala Val Glu

115

120

125

Arg His Arg Ser Val Met Ala Val Gln Leu His Ser Arg Leu Pro Arg

130

135

140

Gly Arg Val Val Met Leu Ile Val Gly Val Trp Val Ala Ala Leu Gly

145

150

155

160

Leu Gly Leu Leu Pro Ala His Ser Trp His Cys Leu Cys Ala Leu Asp

165

170

175

Arg Cys Ser Arg Met Ala Pro Leu Leu Ser Arg Ser Tyr Leu Ala Val

180

185

190

Trp Ala Leu Ser Ser Leu Leu Val Phe Leu Leu Met Val Ala Val Tyr

195

200

205

Thr Arg Ile Phe Phe Tyr Val Arg Arg Arg Val Gln Arg Met Ala Glu

210

215

220

His Val Ser Cys His Pro Arg Tyr Arg Glu Thr Thr Leu Ser Leu Val
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Gly Gln Val Val Leu Leu Leu Asp Gly Leu Gly Cys Glu Ser Cys Asn
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Val Leu Ala Val Glu Lys Tyr Phe Leu Leu Leu Ala Glu Ala Asn Ser
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Leu Val Asn Ala Ala Val Tyr Ser Cys Arg Asp Ala Glu Met Arg Arg
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Thr Phe Arg Arg Leu Leu Cys Cys Ala Cys Leu Arg Gln Ser Thr Arg
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Glu Ser Val His Tyr Thr Ser Ser Ala Gln Gly Gly Ala Ser Thr Arg
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